

ABSTRACT OF THE DISCLOSURE

A system and method for enabling multithreading in a
embedded processor, invoking zero-time context switching in a
5 multithreading environment, scheduling multiple threads to permit
numerous hard-real time and non-real time priority levels,
fetching data and instructions from multiple memory blocks in a
multithreading environment, and enabling a particular thread to
modify the multiple states of the multiple threads in the
10 processor core.